

**Abstract Submitted  
for the 1995 APS Topical Conference  
on Shock Waves in Condensed Matter  
Seattle, WA, 13 August–18 August 1995**

Suggested Session Title:  
Spectroscopy/Experimental methods

March Sorting Category:

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**Fiber-Optic-Coupled Optical Pyrometry in Shock-Wave  
Experiments.** \* N. C. HOLMES, Lawrence Livermore National Lab.—

We have developed a fully fiber-optic-coupled optical pyrometer which has unique advantages for shock-wave temperature measurements. Using fiber-optic input to the system removes the time dependence imposed on the signal from geometrical and depth-of-field effects which occur in imaging optical pyrometers. The large numerical aperture of the system improves sensitivity. The system is easily calibrated to absolute radiance standards, and is useful as well for time-resolved spectroscopy. In addition, the mechanical simplicity of the system allows for increased experimental flexibility.

\*Work performed under the auspices of the U.S. DOE by the LLNL under contract No. W-7405-ENG-48.

- ☐ Prefer Poster Session  
☒ Prefer Standard Session  
☐ No Preference  
☐ Special Facilities Requested

☐ Other Special Requests

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